Rep30

From: Tom Stacy <tfstacy@gmail.com>
Sent: Wednesday, April 17, 2019 10:48 AM
To: Rep30
Subject: Re: HB 6

Typo: The cost of building enough and then under utilizing gas generators is about $35/MWh

Should be $25 not $35. Sorry!

On Wed, Apr 17, 2019 at 10:46 AM Tom Stacy <tfstacy@gmail.com> wrote:

> Treat wind and solar as independent resources, but pro-rate their subsidy based on firm capacity contribution % of nameplate. Wind 14% (PJM's number) Solar 35% (also PJM's) and Nuclear 90% (informal number - may be slightly higher or lower. PJM's lead reliability engineer told me over the phone I was safe for all dispatchable resources at 91%.
>
> So if nuclear receives a dollar in subsidy for a MWh of energy, wind would receive 14%/90% of a dollar (15 cents) and solar 38 cents).
>
> Insinuating batteries will EVER be a more economic solution to intermittency than simply building enough disptchable resources and then forcing them into under-utilization as they back down for wind and solar is COUNTERPRODUCTIVE.
>
> The cost of building enough and then under utilizing gas generators is about $35/MWh of wind generated (at a more conservative 2.7% capacity value of wind) and about $20/MWh of solar generated, whereas batteries sufficient to make wind a base-load equivalent resource and solar an intermediate and peaking resource are in the range of $200-400 and $150-300 /MWh, respectively. I can back up these numbers if need be, but am gainfully employed by groups in DC at the moment and very busy.
>
> Cheers!
>
> Tom Stacy
>
> On Tue, Apr 16, 2019 at 5:19 PM Rep30@ohiohouse.gov <Rep30@ohiohouse.gov> wrote:
>
> > The enclosed article makes the point I made before that renewables cannot function without natural gas baseload plant backup (more on that below). But also makes a very important point that if we want ever want renewables to be truly competitive with baseload generation, battery storage must make significant strides beyond current levels. That is why I have recommended that HB 6 be redesigned so that the non-nuclear money (or at least a significant share thereof) be dedicated to improving battery storage technology. That would be a better investment than "gilding the lily" by lavishing more subsidy on wind and solar farms that are already highly subsidized at the federal and state level-much more so than baseload plants fueled by gas, nuclear, or coal.
> >
> > Back to the top: while renewables cannot function without baseload backup, the converse is not true at all. Baseload plants can function quite well (better, actually) without renewables, as they won't need to ramp up and down to accommodate the intermittent supply of wind and solar power. Building wind and solar on top of natural gas baseload plants is an exercise in cost redundancy (given current battery storage capabilities) as two sets of capital cost must be incurred: building the gas plant, and building the wind or solar farm.